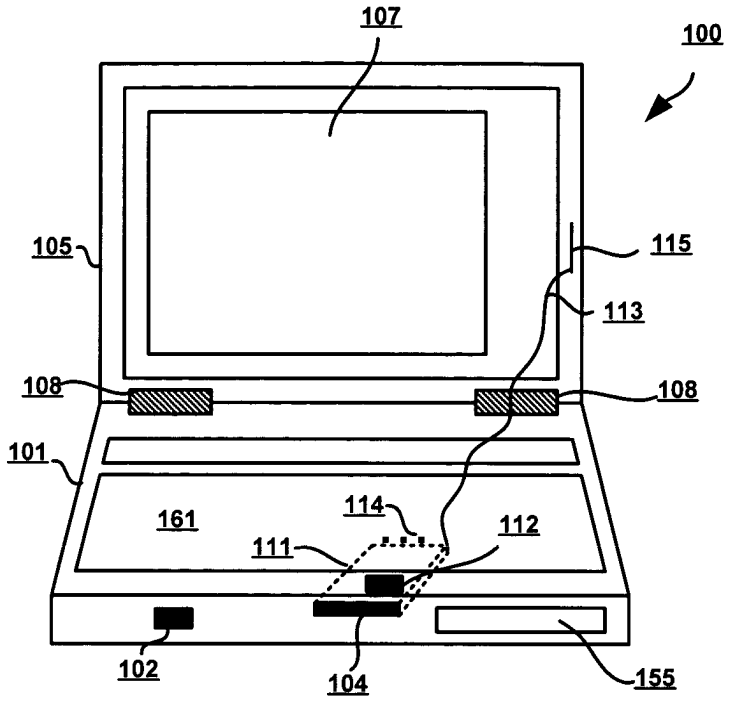

FIGURE 1A

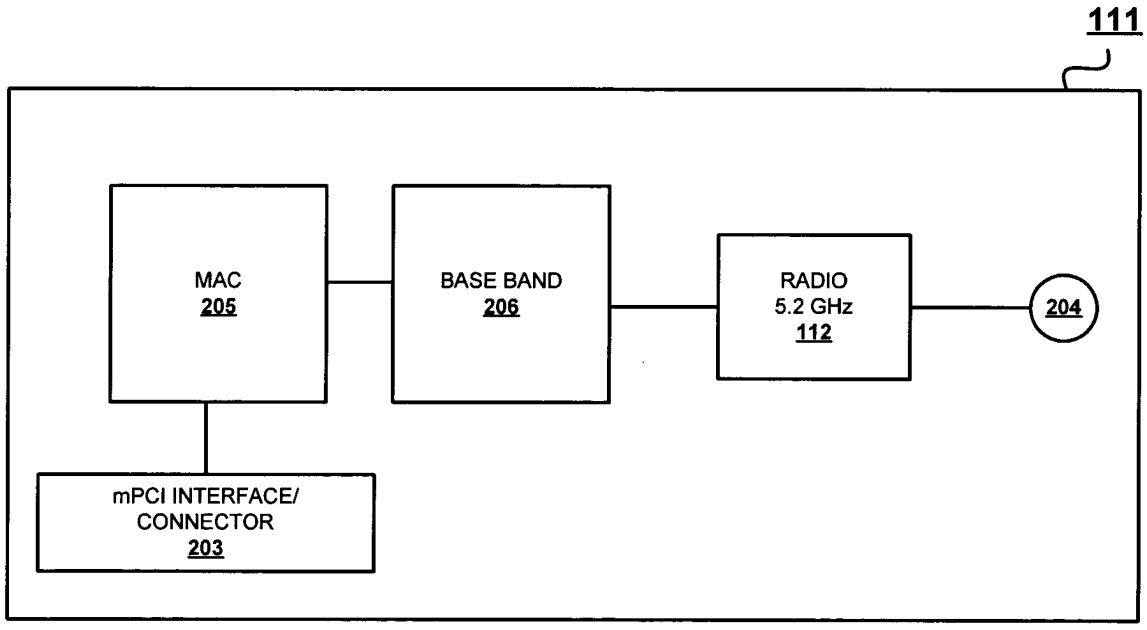

FIGURE 2

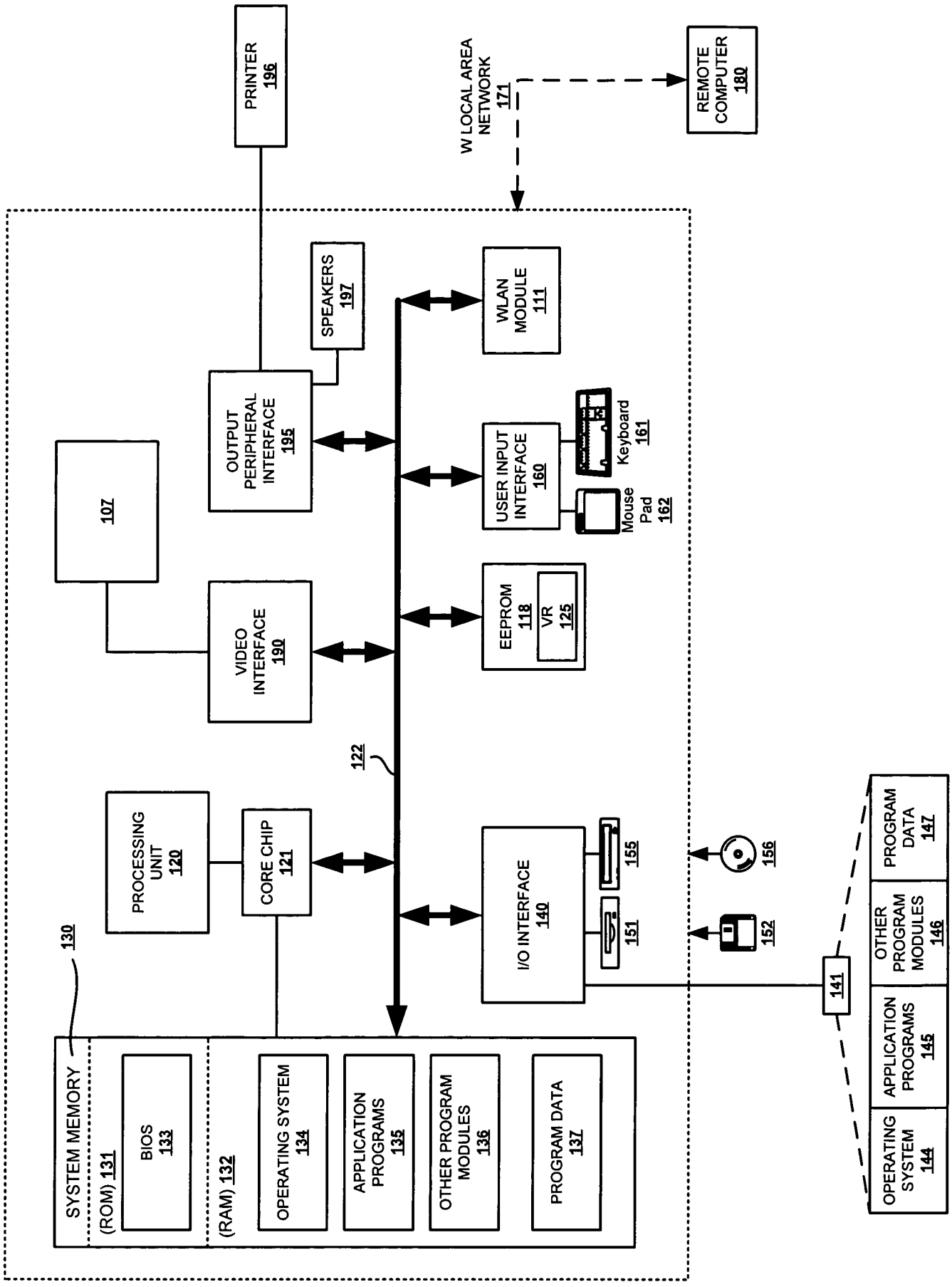
PRINTER 196
W LOCAL AREA NETWORK 171
REMOTE COMPUTER 180
SPEAKERS 197
WLAN MODULE 111
OUTPUT PERIPHERAL INTERFACE 195
USER INPUT INTERFACE 160
Keyboard 161
Mouse Pad 162
107
VIDEO INTERFACE 190
EEPROM 118
VR 125
122
PROCESSING UNIT 120
CORE CHIP 121
I/O INTERFACE 140
155
156
151
152
141
130
SYSTEM MEMORY
(ROM) 131
BIOS 133
(RAM) 132
OPERATING SYSTEM 134
APPLICATION PROGRAMS 135
OTHER PROGRAM MODULES 136
PROGRAM DATA 137
OPERATING SYSTEM 144
APPLICATION PROGRAMS 145
OTHER PROGRAM MODULES 146
PROGRAM DATA 147

FIGURE 1B

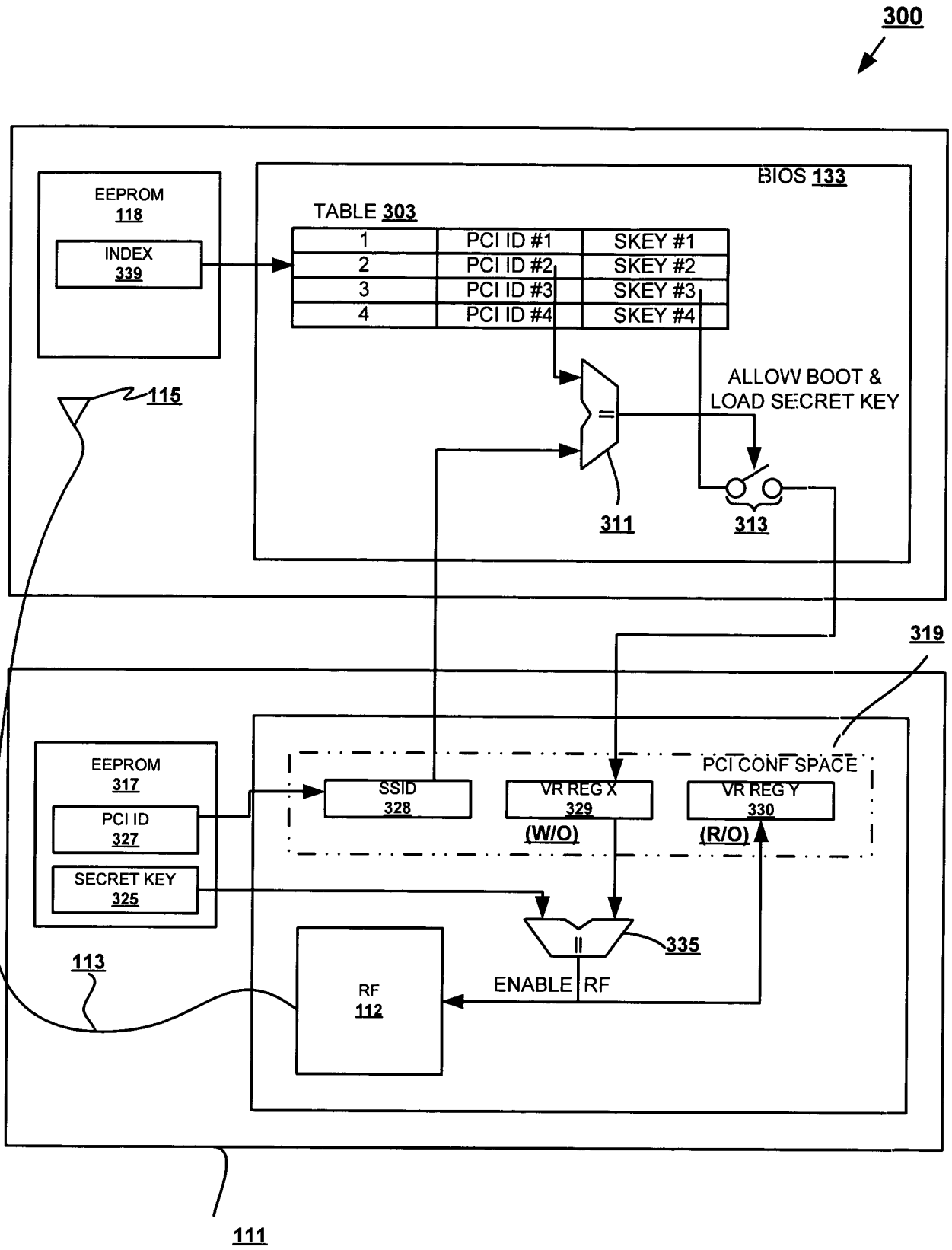
300
EEPROM
118
INDEX
339
BIOS 133
TABLE 303
1
2
3
4
PCI ID #1
PCI ID #2
PCI ID #3
PCI ID #4
SKEY #1
SKEY #2
SKEY #3
SKEY #4
115
=
ALLOW BOOT &
LOAD SECRET KEY
311
313
319
EEPROM
317
PCI ID
327
SECRET KEY
325
SSID
328
VR REG X
329
(W/O)
VR REG Y
330
(R/O)
PCI CONF SPACE
335
113
RF
112
ENABLE RF
111

FIGURE 3A

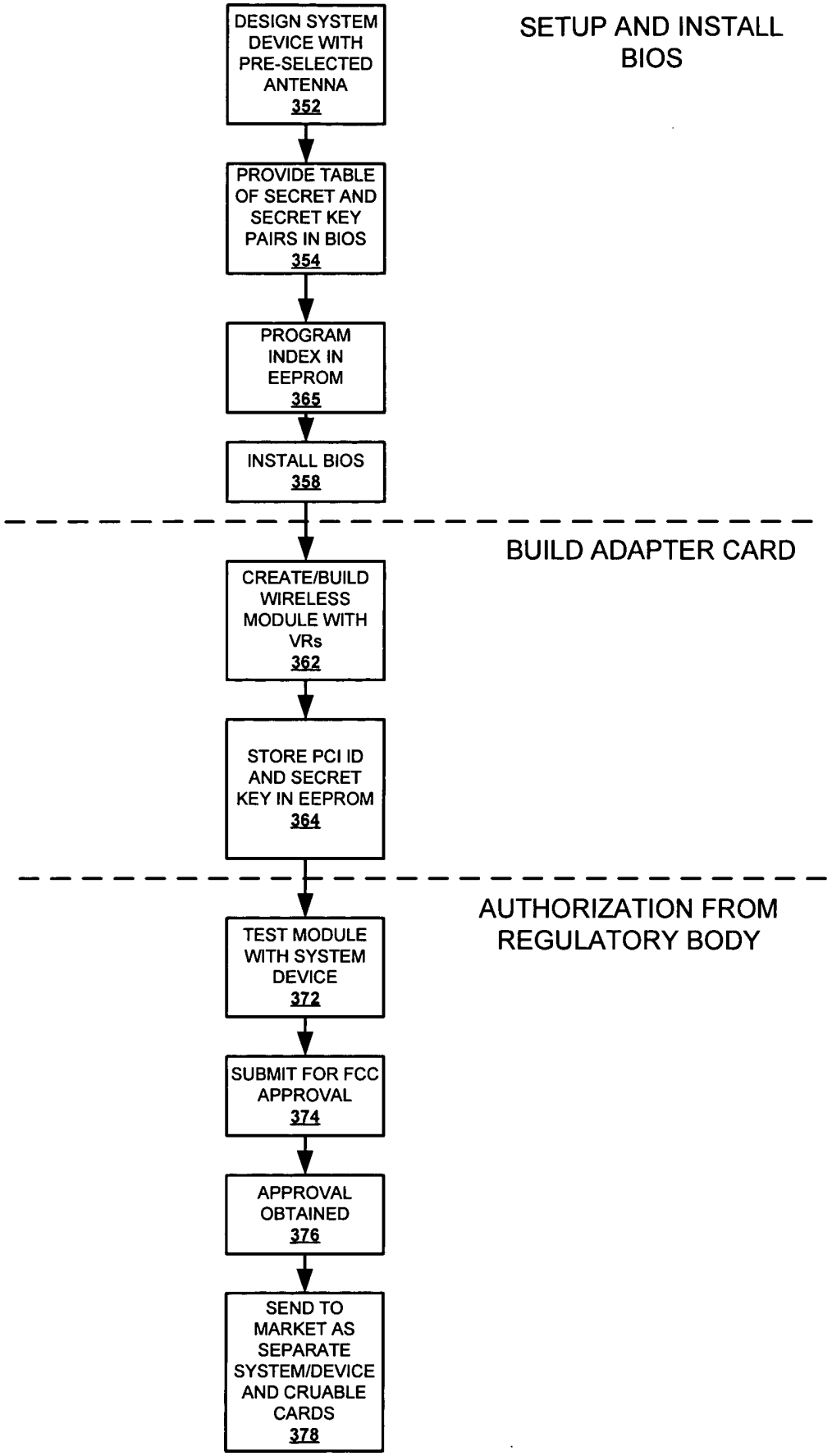
DESIGN SYSTEM DEVICE WITH PRE-SELECTED ANTENNA
352
PROVIDE TABLE OF SECRET AND SECRET KEY PAIRS IN BIOS
354
PROGRAM INDEX IN EEPROM
365
INSTALL BIOS
358
SETUP AND INSTALL BIOS
CREATE/BUILD WIRELESS MODULE WITH VRs
362
STORE PCI ID AND SECRET KEY IN EEPROM
364
BUILD ADAPTER CARD
TEST MODULE WITH SYSTEM DEVICE
372
SUBMIT FOR FCC APPROVAL
374
APPROVAL OBTAINED
376
SEND TO MARKET AS SEPARATE SYSTEM/DEVICE AND CRUABLE CARDS
378
AUTHORIZATION FROM REGULATORY BODY

FIGURE 3B

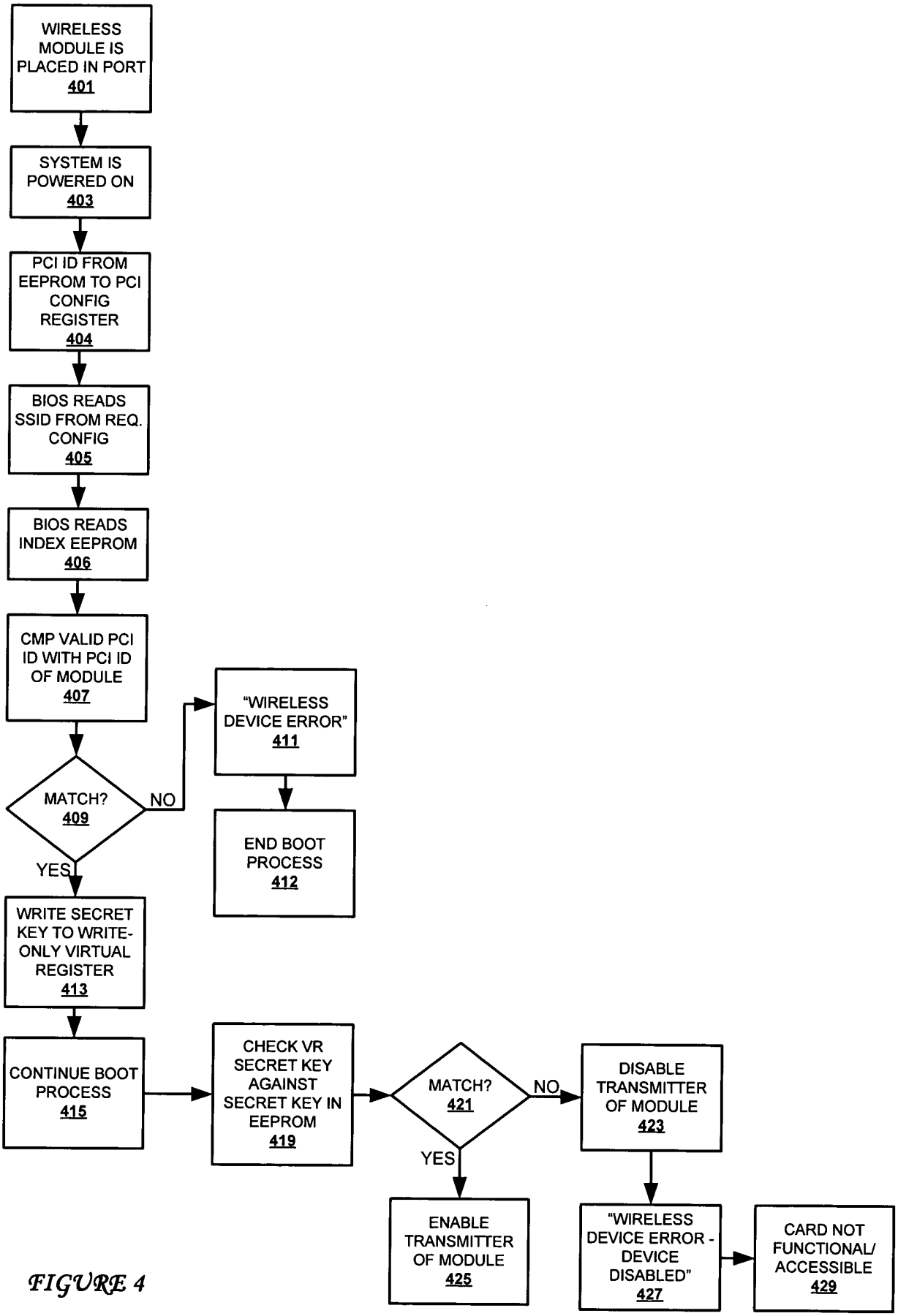
WIRELESS MODULE IS PLACED IN PORT 401
SYSTEM IS POWERED ON 403
PCI ID FROM EEPROM TO PCI CONFIG REGISTER 404
BIOS READS SSID FROM REQ. CONFIG 405
BIOS READS INDEX EEPROM 406
CMP VALID PCI ID WITH PCI ID OF MODULE 407
MATCH? 409
NO
"WIRELESS DEVICE ERROR" 411
END BOOT PROCESS 412
YES
WRITE SECRET KEY TO WRITE-ONLY VIRTUAL REGISTER 413
CONTINUE BOOT PROCESS 415
CHECK VR SECRET KEY AGAINST SECRET KEY IN EEPROM 419
MATCH? 421
NO
DISABLE TRANSMITTER OF MODULE 423
YES
ENABLE TRANSMITTER OF MODULE 425
"WIRELESS DEVICE ERROR - DEVICE DISABLED" 427
CARD NOT FUNCTIONAL/ ACCESSIBLE 429

FIGURE 4